



# CITY OF SAN ANTONIO

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October 24, 2005

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Elena Guajardo  
Councilwoman District 7

Christopher "Chip" Haass  
Councilman, District 10

J. Rolando Bono  
City Manager

Ladies and Gentlemen:

RE: Confidential and Public final audit reports of "Aviation Network and Systems Security"

The audit for Aviation Network and Systems Security was performed during the summer 2005. This review was designed to assess the propriety of the internal control environment and risk management framework for the service processes associated with the Department's network and primary computing systems.

Two reports are being sent to you; one designated as "Confidential", the other "Public". Details of the "Confidential" report and this accompanying transmittal have been declared confidential due to the sensitivity of information in the report related to IT network and infrastructure security. As such, the "Confidential" report should not be discussed, copied or distributed without permission from the City Auditor, Department of Aviation, Information Technology Services Department (ITSD), and the City Attorney. The Public Information Act Section 552.139 addressing confidentiality of information relating to computer security issues is attached. The "Public" report excludes sensitive information and will be made available to the general public via the City Clerk's Office and the City Library.

These reports recommend the organizational reporting structure for Aviation IT should be changed such that it reports to the City's Information Technology Services Department (ITSD). The City's Chief Information Officer, Chief Technology Officer, and Aviation Department concur with the centralization of the IT staff. This should occur when the City's ITSD adopts specific IT practices and standards city-wide. ITSD indicated that staff alignment should be deferred until they have processes, policies and standards under more control.

These reports also recommend that security plans be developed and formalized for the Aviation network (wired and wireless) infrastructure and connected systems. The security plans should include provisions for the implementation of vulnerability testing procedures and secure wireless connectivity standards. These concerns are supported by the following issues identified during the audit:

- Firewall, intrusion detection, and incident handling control processes were not completed.
- Routine and periodic network vulnerability/penetration testing was not being performed.
- Strong wireless network standards had not been established.
- Formal continuity plans had not been developed.
- Service-level agreements do not exist.
- Environmental (fire) safeguards were not sufficient in Aviation computer rooms.

The Department has indicated that it plans to implement the recommendations related to IT security immediately, followed by the system reliability issues, and then work on improving service performance standards.

Finally, these reports included two repeat issues from a prior Aviation Department audit issued in January 2004:

- The Automated Parking System (APS) has been maintained and security access has been controlled by the Parking Manager which is not an appropriate segregation of duties.
- No surveillance devices had been installed in the Economy Parking Lot cashier booths.

Aviation Management indicated that it has implemented logical and physical security over the APS. However, the Department responded that the purchase of surveillance equipment would be dependent on approval of grant funding. The City Internal Audit Department points out that that this issue was a priority in the prior audit. Cashier booth surveillance equipment was also highlighted by the City-wide Cash Handling Initiative that began in December 2003 and is still on-going. The Aviation Parking operation, as an Enterprise Fund, generates substantial revenue to pay the relatively low cost to implement this recommendation. Therefore, this control should not be contingent upon approval of grant funding.

The audit team appreciated the cooperation and assistance extended by Aviation Department Systems staff and ITSD in performing this audit. The City Internal Audit Department is available to discuss the details of these reports with you at your individual convenience.

Sincerely,



Patricia M. Major CPA, CIA, CTP, CGFM  
City Internal Auditor

Attachment

cc: Roland A. Lozano, Assistant to the City Manager and Interim Aviation Director  
Michael Armstrong, CIO and Assistant City Manager  
Erik Walsh, Assistant to the City Manager  
Dom Smith, Assistant Aviation Director  
Hugh Miller, CTO and Director, ITSD  
Michael Bernard, City Attorney